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REQUEST FOR CERTIFICATE OF  
CORRECTION UNDER 37 CFR 1.322  
Docket No. UF.412XC1

October 17, 2011



Margaret H. Efron, Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Nan-Yao Su *et al.*  
Issued : August 16, 2011  
Patent No. : 7,998,496  
For : Use of Molt-Accelerating Compounds, Ecdysteroids, Analogs Thereof,  
and Chitin Synthesis Inhibitors for Controlling Termites  
Conf. No. : 2272

Mail Stop Certificate of Corrections Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

REQUEST FOR CERTIFICATE OF CORRECTION  
UNDER 37 CFR 1.322 (OFFICE MISTAKE)

Sir:

A Certificate of Correction for the above-identified patent has been prepared and is attached hereto.

In the left-hand column below is the column and line number where errors occurred in the patent. In the right-hand column is the page and line number in the application where the correct information appears.

**Patent Reads:**

Column 8, Line 28:  
"Kalotemiitidae"

Column 8, Lines 32-33:  
"Ainitermes"

Column 8, Line 34:  
"Zooterinopsis"

Column 10, Line 5:  
"Deeding"

**Application Reads:**

Page 11, Paragraph [0044], Line 6:  
--Kalotermitidae--

Page 11, Paragraph [0044], Line 9:  
--Amitermes--

Page 11, Paragraph [0044], Line 10:  
--Zootermopsis--

Page 13, Paragraph [0051], Line 4:  
--feeding--

A true and correct copy of Pages 11 and 13 of the specification, which support the applicants' assertion of the errors on the part of the Patent Office accompanies this Certificate of Correction.

Approval of the Certificate of Correction is respectfully requested.

Respectfully submitted,



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MHE/kmm/trb

Attachments: Pages 11 and 13 of the specification  
Certificate of Correction

UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,998,496  
APPLICATION NO. : 10/589,770  
ISSUE DATE : August 16, 2011  
INVENTOR(S) : Nan-Yao Su, Paul Allen Neese, James Edward King

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 8,

Line 28, "Kalotemiitidae" should read --Kalotermitidae--

Lines 32-33, "Ainitermes" should read --Amitermes--

Line 34, "Zooterinopsis" should read --Zootermopsis--

Column 10,

Line 5, "Deeding" should read --feeding--

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lead those skilled in the art to believe and expect that other ecdysone agonists, especially those having desirable structural characteristics, can now be used to advantageously control termites. In preferred embodiments, one can use ecdysone and 20E in baits to induce hyperecdysonism in foraging worker caste (and non-foraging by trophallaxis) subterranean termites.

[0044] With the foregoing considered, examples of termite species that can be targeted (selectively) by use of the subject methods include *Coptotermes formosanus*, *Reticulitermes flavipes*, *R. hesperus*, *R. virginicus*, *R. tibialis*, and *Heterotermes aureus*, as well as termite species of the families (and pest genera) Mastotermitidae (*Mastotermes* species), Hodotermitidae (*Anacanthotermes*, *Zootermopsis* species), Rhinotermitidae (*Coptotermes*, *Heterotermes*, *Reticulitermes*, *Psammotermes*, *Prorhinotermes*, *Schedorhinotermes* species), Kalotermitidae (*Glyptotermes*, *Neotermes*, *Cryptotermes*, *Incisitermes*, *Kalotermes*, *Marginitermes* species), Serritermitidae, and Termitidae (*Pericapritermes*, *Allodontermes*, *Microtermes*, *Odontotermes*, *Nasutitermes*, *Termes*, *Amitermes*, *Globitermes*, *Microcerotermes* species), Termopsidae (*Hodotermopsis*, *Zootermopsis* species), and other pest species of termites. Preferably, methods of the subject invention are used to target subterranean termites.

[0045] The subject invention can be practiced in many ways. Some preferred apparatuses are described in WO 93/23998, U.S. Patent No. 6,370,812, and U.S. Patent No. 6,397,516. Some embodiments of the subject invention can include a housing that is designed to enclose a monitoring device and/or toxicant-containing matrix. This housing is useful for protecting the monitoring device and/or toxicant-containing matrix from the environment. The monitoring device or matrix can be enclosed within the housing in such a manner so they can be removed with minimal disruption to the foraging termites. This housing is preferably made from a durable, non-biodegradable material. Preferably, once infested by termites, the monitoring device can be gently removed from the soil or from the station housing (it is advantageous to utilize a station housing to minimize disruption to foraging tunnels). Upon removal of the monitoring device, a toxicant-containing matrix, comprising an ecdysteroid or an analog thereof (and CSI if desired), can then be placed in the station housing. The monitoring device and the toxicant matrix preferably comprise cellulose.

[0046] Various materials can be used, if desired, to encase the toxicant-containing matrix. This method for packaging the toxicant-containing matrix can also be used to create "dose-packs" that precisely provide the appropriate amount of toxicant. "An effective amount" of the subject

first. At the desired time (for example, when sufficient time has elapsed to allow molting to be initiated), the CSI could then be provided. The CSI could also be provided first (to allow for dispersement in the colony, for example). The MAC/ecdysteroid/ecdysteroid analog could then be provided (for example, to initiate molting and to provide for enhanced kill / control of the termites). Factors such as timing and dosage can be optimized, according to the subject invention (for example, to effect control of the entire colony or colonies, to ensure adequate dispersal through the colony, and the like).

[0050] All patents, patent applications, provisional applications, and publications referred to or cited herein are incorporated by reference in their entirety to the extent they are not inconsistent with the explicit teachings of this specification.

[0051] Following are examples that illustrate procedures for practicing the invention. These examples should not be construed as limiting. All percentages are by weight and all solvent mixture proportions are by volume unless otherwise noted.

Example 1 – Protocol for feeding ecdysone to subterranean termites and determining the effects thereof

[0052] Termites were collected from three colonies each of *C. formosanus* and *R. flavipes* and were held in the laboratory at  $26 \pm 1^\circ\text{C}$  and  $98 \pm 2\%$  RH before use. Technical grade ecdysone was dissolved in methanol to obtain 0.1, 1, 10, 100 and 1,000-ppm solutions by serial dilution. Methanol solutions (*i.e.*, 0 ppm AI) were used as untreated controls. Each concentration solution (0.2 ml) was pipetted onto 55-mm-diameter Whatman No. 1 filter paper fitted into 5-cm-diameter glass Petri dishes and allowed to evaporate overnight.

[0053] This filter paper served as the cellulose food source for twenty-five termites, plus one soldier for *R. flavipes* or three soldiers for *C. formosanus*, which were introduced into each Petri dish after moistening the filter paper with 0.175 ml deionized water. For each species, two subsamples each of three colonies were used per concentration for a total of 72 experimental units. The bioassay units was held at  $26 \pm 1^\circ\text{C}$ . Observation was made daily for 12 days. Termites showing symptoms of incomplete molting were counted, and dead termites were removed from each unit. Because affected termites did not recover, they were included in